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(21) International Application Number: PCT/US96/04028 (22) International Filing Date: 25 March 1996 (25.03.96) (30) Priority Data: 08/418,709 , 7 April 1995 (07.04.95) US (71) Applicant: WARNER-LAMBERT COMPANY [US/US]; 201 Tabor Road, Morris Plains, NJ 07950 (US). (72) Inventors: SAXENA, Uday; 3079 Deercreek Court, Ann Arbor, MI 48105 (US). TRIVEDI, Bharat, Kalidas; 36955 Aldergate Court, Farmington Hills, MI 48335 (US). (74) Agents: RYAN, M., Andrea; Warner-Lambert Company, 201 Tabor Road, Morris Plains, NJ 07950 (US) et al.		(81) Designated States: AU, BG, CA, CN, CZ, EE, GE, HU, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, UA, UZ, Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 12 December 1996 (12.12.96)

(54) Title: **FLAVONES AND COUMARINS AS AGENTS FOR THE TREATMENT OF ATHEROSCLEROSIS**

(57) Abstract

Flavones and coumarins or a pharmaceutically acceptable salt thereof are inhibitors of VCAM-1 and ICAM-1 and are thus useful in the treatment of atherosclerosis, restenosis, and immune disorders such as arthritis and transplant rejection.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K31/35 A6 1/37

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	INT. ARCH. ALLERGY IMMUNOL., vol. 107, no. 1-3, 13 July 1995, pages 435-436, XP000576204 E. MIDDLETON ET AL.: "Quercetin inhibits lipopolysaccharide-induced expression of endothelial cell intracellular adhesion molecule-1" see the whole document	1-5
O,X	& Conference on "Molecular and Clinical Implications for Allergy in the 21st Century" in Nantucket, Massachusetts September 25-29, 1994 --- -/-	1-5

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *&* document member of the same patent family

Date of the actual completion of the international search

19 July 1996

Date of mailing of the international search report

17.10.96

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	NED. TIJDSCHR. GENEESKD., vol. 119, no. 117, 26 April 1975, pages 673-677, XP000575659 A. DE NEELING: "Coumarine bij atherosclerose" see the whole document	1-5
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A	PHARM. WEEKBL. SCI., vol. 6, no. 1, 24 February 1984, pages 27-31, XP000575665 H.K. NIEUWENHUIS ET AL.: "Agents interfering with the platelet-vessel wall interaction" see abstract	1-5
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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please see next page

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-5 (partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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